

303 5/8"

To Rev A Drawing Siglec123.
~~PRELIMINARY ADVISORY~~
~~PRELIMINARY ADVISORY~~

Work Order ID 140479

Wednesday, January 06, 2016 9:31:30 AM

140479

Item ID: D5346-1
Revision ID: ~~PRELIM~~
Item Name: Bushing



Accept

N9000040100

Setup Start *NS1*
Stop *NS2*

Start Date: 1/6/2016 Start Qty: 20.00 *20*
Required Date: 1/6/2016 Req'd Qty: 20.00 *20*

Cust Item ID:
Customer:

Reference:

Approvals: Process Plan: MLJ Date: JAN 06 2016 Tooling: Date:
QC: Date: SPC (Y/N): Date:

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D5346	PA5 <u>Rev AS</u>

100
100
Hardinge
Hardinge CNC Lathe Small
Hardinge CNC LATHE SMALL
Memo
1-TURN AS PER FOLIO FB439 & DWG FOLIO REV: AA
DWG REV: AS

20 0

DAS
45
9-89
2016-01-06

110
110
QC
Quality Control
QC2- Inspect parts off machine FAI/FAIB
Memo

20 0

DAS
45
9-89
2016-01-06



DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 140479

Wednesday, January 06, 2016 9:31:35 AM

140479

TO Rev A Drawn S
~~PRELIMINARY ISSUE~~
~~PRELIMINARY ISSUE~~

Page 2

Item ID: D5346-1

Accept

N900040100

Setup Start ***NS1***

Revision ID: PRELIM

Item Name: Bushing

Stop ***NS2***

Start Date: 1/6/2016 Start Qty: 20.00

20

Cust Item ID:

Required Date: 1/6/2016 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals: Process Plan: Date:

Tooling: Date:

Run Start ***NR1***

QC: Date:

SPC (Y/N): Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC8- Inspect parts - second check

0.00

120

QC

Memo

0.01

Quality Control

POSITIVE RECALL

EFFECTIVE JAN 06 2016 AUTH MJS

RELEASED DAS DATE 2016/01/23

RD15-1016-01

JAN 07 2016

130

Identify as per dwg & Stock Location

0.00

130

Packaging

Memo

0.00

Packaging

Rev A Draw

JAN 07 2016

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.03

Quality Control

POSITIVE RECALL

EFFECTIVE 16-01-06 AUTH MJS

RELEASED DAS DATE

RD16-1016-01

JUL 10 2017

JUL 10 2017

JUL 10 2017

DAS
6
9-89

JAN 12 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐						
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval			
Description Work Order Deviation				Disposition						
Root Cause		FAULT CATEGORY								
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :						
Misidentified	☐	Past Due	☐							

Picklist Print

Wednesday, January 06, 2016 9:31:41 AM

Work Order ID: 140479

Parent Item: D5346-1

Parent Item Name: Bushing

140479

D5346-1

TO Rev A Drawing 5
~~PRELIMINARY ISSUE~~
~~PRELIMINARY ISSUE~~

Page 1

Start Date: 1/6/2016

Required Date: 1/6/2016

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP REV:A NEW ISSUE 15-11-23 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303R0.625		Purchased	No				f	7.6842		1.315789			

M303R0 625

303 Round Bar 0.625"

**

Location

Loc Qty

Loc Code

MAT

7.6842

m133368

7.6842

Q.600 ¹²

DAS

45

9-89

2016-01-06

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

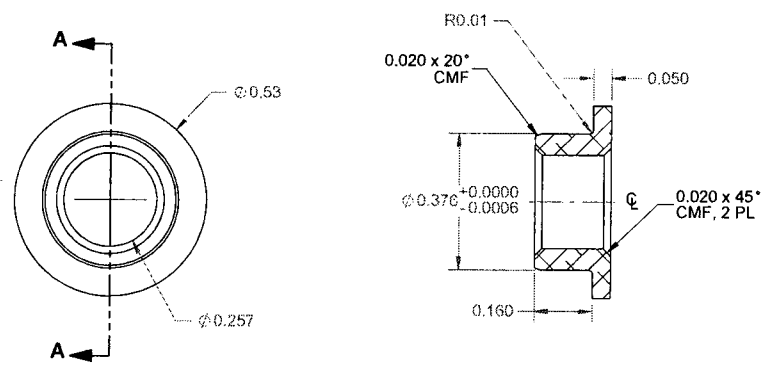
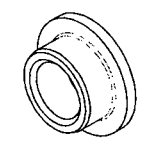
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____ _____ _____			
Misidentified ☐	☐	Past Due ☐	☐				

11 NOV 1980
11 NOV 1980



SECTION A-A

D5346-1 BUSHING

- NOTES:**
- 1) MATERIAL: AISI 303/304/316, STAINLESS STEEL ROUND BAR
PER ASTM A582 OR ASTM 276
(REF. DART SPEC M303R OR M304R)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.01 lbs

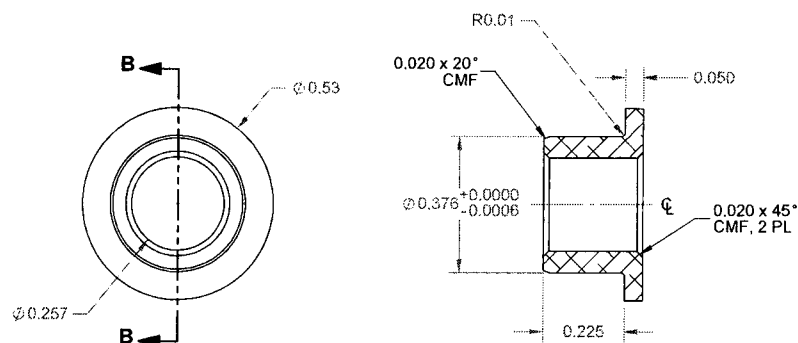
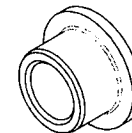
CONTROLLED COPY
140479 MJS
16-01-06

PRELIMINARY ISSUE

REV.	NEW ISSUE	DESCRIPTION	RF	15.08.10
DESIGN	RF			
DRAWN	RF			
CHECKED	VS			
MFG. APPR.	JFS			
APPROVED				
DE APPR.				
DATE	15.08.10			

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	REV. A5
DRAWING NO. D5346	SHEET 1 OF 2
TITLE BUSHING	SCALE NTS

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SECTION B-B

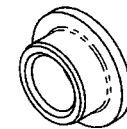
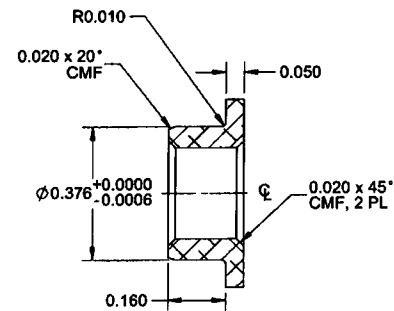
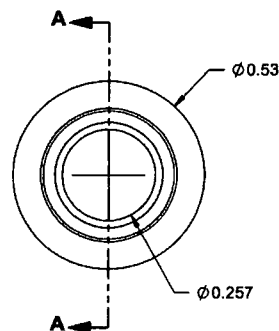
D5346-3 BUSHING

NOTES:

- 1) MATERIAL: AISI 303/304/316, STAINLESS STEEL ROUND BAR
PER ASTM A582 OR ASTM 276
(REF. DART SPEC M303R OR M304R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.01 lbs

PRELIMINARY ISSUE

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	VS	DRAWING NO.	REV. A5
MFG. APPR.	JFS	D5346	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		BUSHING	NTS
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SECTION A-A

D5346-1 BUSHING

NOTES:

- 1) MATERIAL: AISI 303/304/316, STAINLESS STEEL ROUND BAR
PER ASTM A582 OR ASTM 276
(REF. DART SPEC M303R OR M304R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.01 lbs

RELEASED
2016-01-21

APPROVED

A NEW ISSUE		RF	15.08.10
REV.	DESCRIPTION		BY DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	AK	DRAWING NO.	REV. A
MFG. APPR.	JLM	D5346	SHEET 1 OF 2
APPROVED	HS	TITLE	SCALE
DE APPR.	D9	BUSHING	NTS
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